

REMARKS

The present application includes claims 23-26, 30-43 and 45-86. Claims 23, 45, 50, 72, 82 and 86 were amended.

Rejections for non-statutory material

Claims 45-52 were rejected under 35 USC 101 as directed at non-statutory subject matter. The Examiner stated that claims 45 and 50 fail to produce a useful, concrete and tangible result (page 3 of office action). The Examiner further stated that in independent claims 45 and 50, each and every recited method step is an abstract step that fails to produce a useful, concrete and tangible result.

Applicant respectfully traverses the rejection. Nonetheless, claims 45 and 50 were amended to use the word "storing" as such amendment does not change the scope of the claim and may aid the Examiner in allowing the claim.

New matter rejections

Claim 23 was rejected under 35 USC 112, first paragraph, for including the statement: "each of which tools stores information restricted to viewing by a respective limited group of workers", which the Examiner stated is not supported by the specification.

Applicant amended the claim to use the term "at least some", instead of "each", to more closely reflect the passage on page 6, lines 4-8:

"Optionally, a company designing the vehicle includes at least one group of workers which are restricted from viewing information relating to the vehicle and gathering the information includes gathering information which is not restricted for viewing by substantially any of the workers of the company. Optionally, gathering the information includes gathering from tools which carry information restricted for viewing within the company designing the vehicle."

This passage provides support for the limitation, as if the information is restricted for viewing there is a group of workers that is restricted from viewing it.

Clarity rejections

Claim 23 was rejected under 35 USC 112, second paragraph for using the statement: "providing a plurality of computerized design tools, each of which tools stores information restricted to viewing by a respective limited group of workers, assigned to a different system of the vehicle;", which the Examiner considers unclear.

The claim was amended to make clear that the workers are assigned to different systems of the vehicle.

Other than that, the Examiner's rejection is unclear and applicant sees nothing wrong with the statement as amended. It describes general practice in the art in which information in design tools are restricted for viewing only to a group of workers. It was included in order to emphasize that the index is created only with non-confidential information, on the insistence of the Examiner.

Independent claim 32

The Examiner stated that the term "said information including only a subset of said hydraulic design information and said electronic design information;" is unclear since the term "only" used in the claim infers that the information includes only hydraulic and electronic information.

Applicant respectfully submits that the statement is clear and relates to the fact that only a subset of the hydraulic information and only a subset of the electronic information is included in the stored information and does not state anything on the other design information. This is clear from a simple reading of the claim as well as from the analysis of the Examiner that any other interpretation would contradict the contents of the claim itself.

The Examiner further stated that the term "disciplines of the vehicle" is vague and indefinite. Applicant refers to the following definition of the term "discipline" at www.dictionary.com:

"9. a branch of instruction or learning: *the disciplines of history and economics.*"

The Examiner further stated that the statement: "sending an electronic message, by the first worker, to a second worker assigned to another system or discipline of the vehicle, based on information found in the search" is not clear, because the statement does not state on what basis the worker contacts another worker. The Examiner suggested that the claim state that the contacted worker is in charge of the element.

Applicant does not understand what is unclear. The statement clearly states that the first worker contacts the second worker based on the search. The question of why the worker came up in the search is not a matter of unclarity. The first worker can contact the second worker on any basis, as long as the information found in searching the database is used. Applicant respectfully notes that the second worker is not necessarily the worker in charge of the element, but could be any worker appearing in the database.

The Examiner further stated that the term "worker" is unclear as if the method were performed by a volunteer the performance would apparently be beyond the scope of the claim.

Applicant does not understand the rejection. In a quick electronic search in the USPTO web site, applicant found 1079 US patents that use the term "worker" in the claims. It is hard to understand how all these patents were allowed without realizing their claims are indefinite. Furthermore, applicant submits that the word worker does not exclude a volunteer. A worker is someone who performs work or a task. Only a term such as "employee," which was not used would have the import suggested by the Examiner.

The Examiner stated that: "The Examiner is entirely unaware of any precedent or guidance in the MPEP that suggests that a method may be patentably distinguished from the prior art purely on the basis of the type of person performing the method." Applicant respectfully submits that it is the claim in its entirety that is required to be patentable over the art and not every word of the claim. Applicant submits that the claim is not distinguished by the use of the word worker.

Independent claim 45

Claim 45 was rejected for being unclear. As to the use of the term "substantially all", applicant directs the Examiner to MPEP 2173.05(b) D, which reads:

The term "substantially" is often used in conjunction with another term to describe a particular characteristic of the claimed invention. It is a broad term. *In re Nehrenberg*, 280 F.2d 161, 126 USPQ 383 (CCPA, 1960). The court held that the limitation "to substantially increase the efficiency of the compound as a copper extractant" was definite in view of the general guidelines contained in the specification. *In re Mattison*, 509 F.2d 563, 184 USPQ 484 (CCPA 1975). The court held that the limitation "which produces substantially equal E and H plane illumination patterns" was definite because one of ordinary skill in the art would know what was meant by "substantially equal." *Andrew Corp. v. Gabriel Electronics*, 847 F.2d 819, 6 USPQ2d 2010 (Fed. Cir. 1988).

The use of the term "substantially all" in claim 45 is similar to the use in *Andrew Corp. v. Gabriel Electronics* in which the court stated that one of ordinary skill in the art would know what was meant. In both cases, a clear definition of the standard to be used in determining the extent of the claim (in *Andrew Corp.* - "equal", in the present application - "all the elements of the aircraft that are handled by a plurality of personnel from different departments") is qualified by the term "substantially".

In contrast, the terms in MPEP 2173.05(b) F, such as "of the order of" and "substantial portion" do not provide any standard to be used in determining the degree intended.

Applicant respectfully notes that in an electronic search in issued US patents applicant found over a thousand patents having the word "substantially" in the claims.

Claims 77 and 84

Claims 77 and 84 were rejected for using the statement: "does not include sufficient information for at least some of said design tasks". The Examiner stated that it is unknown how to

assess whether there is insufficient information for design tasks. Applicant respectfully submits that in any case it is easy to determine whether there is sufficient information to do a task. In this and all other rejections that the Examiner states that it would be a problem to determine whether the art describes the limitation or not, applicant respectfully submits that this is not a problem of clarity of the claims. The burden is on the Examiner to present a *prima facie* rejection based on the art. It is not a replacement for this to declare a claim as being unclear because the Examiner does not know how to search for the prior art. If the Examiner has some art for which he believes determination is problematic, the proper procedure would be to cite the art and explain why the Examiner believes that it provides a *prima facie* case of unpatentability.

Independent claim 82

Regarding claims 82 and 86, the Examiner repeated the rejection regarding the use of the term "worker". Applicant related to this rejection with regard to claim 32.

The Examiner further rejected the use of the term "contemplating" and "contemplated change". Although applicant disagrees to the rejection, applicant removed these terms from the claims.

Applicant points out that the claims when read in their entirety clearly convey a set of acts which can easily be compared to the prior art. The Examiner's examination method requiring that each word of the claims be patentable on its own is not supported by the MPEP and seems to be a novel method in patent examination.

Applicant points out that in the USPTO database there are 228 patents that include the word "contemplated" and 13 that include the word "contemplating", in their claims.

The Examiner further rejected use of the word "deciding". In response, applicant removed the word from the claim.

Examiner not performing complete Examination

The Examiner did not perform a complete examination of the application, although MPEP 2143.03 cited by the Examiner in the office action: "*Ex parte Ionescu*, 222 USPQ 537 (Bd. Pat. App. & Inter. 1984) (Claims on appeal were rejected on indefiniteness grounds only; the rejection was reversed and the case remanded to the Examiner for consideration of pertinent prior art.)", seems to imply he should have.

None of the clarity rejections made by the Examiner make the claims so unclear that they cannot be searched and examined. The rejections based on use of the terms: "worker", "contemplating", "deciding" and "discipline", do not make the claims so unclear to preclude any reasonable examination.

Not only did the Examiner fail to perform a complete examination, the Examiner stated on page 14 of the office action that according to 37 CFR 1.111(c), "the applicant or patent owner must clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made". The Examiner emphasized that the requirement applies to references cited and not merely to references applied in rejections.

Applicants respectfully point out to the Examiner that 37 CFR 1.111(c) relates to applications or patents under reexamination and not to all applications.

In regular applications the burden is on the Examiner to provide a *prima facie* case. This requires comparison of the prior art with the claims *by the Examiner*. Only then must the applicant provide his rebuttal. Not only has the Examiner not provided such a case, he has not even rejected the claims on the art. It appears that the Examiner is seeking to shift his clear burden to the applicant.

Nonetheless, in order to further the application toward allowance, applicant relates to the two references cited by the Examiner.

Regarding US patent 5,812,130 to Van Huben et al., the Examiner referred to col. 25, lines 30-36, which states that "the DCS can be programmed to only enforce design fix tracking on certain data types."

In the absence of a rejection, it is not easy to determine why this was cited by the Examiner. Applicant assumes that this was cited regarding the requirement of claim 32 of:

"storing the gathered information in a database ... said information including only a subset of said hydraulic design information and said electronic design information;"

Applicant, however, does not understand a connection between a DCS that only enforces design fix tracking on certain data types and a database that stores only a subset of information. The paragraph on col. 10, lines 53-65 of Van Huben is more relevant, in that it specifically states and repeats that "The Design Control Repository contains the control information for all components of the design. This includes such things as the names of all the pieces ..."

As to Gifford, applicant does not understand why the Examiner cited this reference. It does not relate to assigning elements of aircrafts with codes responsive to the system of the element as required by claim 45, but rather relates to the trivial idea of indexing database entries.

The Examiner's reference to MPEP 2144-2144.09 appears to be a hint that the difference between collecting all information and collecting only some of the information is a mere change in size. Applicant respectfully disagrees.

In applicant's previous response, applicant stated as follows:

"The prior art presented by the Examiner generates a database which collects all the data of the vehicle. While such a database may have its advantages it cannot be efficiently used as a fast communication tool between workers for various reasons, such as size, security and unnecessary information. In addition, the prior art that includes all information has not shown an appreciation of the importance for a tool that allows substantially every design worker to get an overview of the entire vehicle and avoid inter-system design problems before they occur or solve them early in the design. To the best of applicant's knowledge, the prior art at the time the present application was filed was directed at having each worker deal only with the system to which he/she is assigned without getting an overall view of the vehicle."

Jolliffe

The examiner responded to the above statement in stating that "It is noted that an aircraft may contain millions of rivets, each of which are a physical elements. The Examiner does not understand Jolliffe to teach selecting rivets to be stored in the database. Jolliffe therefore stores fewer than 10% of the physical elements in the database."

Applicant respectfully disagrees.

No where does Jolliffe teach or suggest that the database does not list rivets or any other elements. The Examiner is respectfully requested to provide a reference that states that rivets are not listed in a database of all the elements, such as described by Jolliffe, as applicant is not aware of such a practice. In fact, applicant respectfully submits that it is hard to believe that in an industry such as aircraft manufacture, in which in some cases composite materials and/or friction stir welding are used, even the smallest rivets will be omitted from a database describing an aircraft. The Examiner's statement that they are not included in the database of Jolliffe was brought without support and cannot be used in rejecting claims.

Furthermore, the Examiner has not brought any proof that rivets constitute more than 90% of the elements of an aircraft.

In addition, claims 59 and 83 were amended to state that the percentages relate to the elements of the vehicle described by the design tools, such that even if Jolliffe were not to include rivets in his database, he would not read on claims 59 and 83, since also the design tools of Jolliffe would not describe the rivets.

Other remarks

On page 16 of the office action, the Examiner stated that applicants present claims that require: "selecting substantially all the elements" to store in a database, yet argue that the prior art,

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which allegedly stores all of the elements is somehow patentably distinct from the claimed invention. This contradiction emphasizes the indefiniteness of the claim language and fails to distinguish the claimed invention from the prior art.

In response, applicant respectfully submits that there is no contradiction. First of all, claim 45 is a separate claim which may have a different scope from other claims. Second, reading the entire statement in claim 45, without cutting it in the middle, presents a proper understanding of the claim.

The true citation was (claim 45): "selecting substantially all the elements of the aircraft that are handled by a plurality of personnel from different departments". Clearly, claim 45 does not require all the elements.

Anticipation rejection

Claims 72-74 and 41-42 stand rejected under 35 USC 102(b) as being anticipated by Jolliffe (US patent 5,646,862).

Claim 72 was amended to emphasize that the selecting does not include 0% of the elements, by stating that a plurality of elements are selected.

The Examiner's rejection based on Jolliffe admittedly does not perform the acts of gathering, storing and searching and actually does not perform selecting, as selecting 0% of the elements is not a selection at all. The Examiner has therefore not provided a *prima facie* rejection.

Conclusion

Applicant respectfully submits that the claims are clear, concise and patentable over the prior art. Applicants officially request an interview in Washington with the Examiner and his supervisor in an attempt to move the application toward allowance. In order to allow for time to set up this interview, applicant is filing an RCE. If the Examiner is interested in contacting applicant, applicant respectfully requests that the Examiner call the undersigned at 1 (877) 428-5468. Please note that this is a direct toll free number in the US that is answered in the undersigned's Israel office. Israel is 7 hours ahead of Washington.

Respectfully submitted,

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Encl:

Request for Continued Examination (RCE)
Petition for Extension for one (1) month time